UNIVERSITY OF PENNSYLVANIA

A CLASSIFICATION OF THE CHITONS WORN BY GREEK WOMEN AS SHOWN IN WORKS OF ART

ALBERT WINSLOW BARKER

A THESIS
IN GREEK
PRESENTED TO THE FACULTY OF THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

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Reprint from

Proceedings of the Delaware County Institute of Science, Vol. IX, No. 3

Media, Pa., U. S. A.

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A CLASSIFICATION OF THE CHITONS WORN BY GREEK WOMEN AS SHOWN IN WORKS OF ART.

BY ALBERT W. BARKER.

When I undertook to write about Greek costume I was aware that much had already been written on the subject and that almost all the writers had contributed something of value to the discussion. But certain facts of great moment appeared to have passed unnoticed hitherto; for instance, the almost complete absence from the grave-reliefs of the Doric chiton with short overfold as a sole garment, the predominance of costumes composed of two chitons in the same monuments, and the sharp distinction that must be drawn between the costumes attributed to the goddesses of Olympus and the heroines of myth on the one hand, and the domestic costumes of the fifth and fourth centuries in Athens on the other. Therefore it seemed that there was occasion for an independent re-examination of the evidence. If I do not often quote, it is because the subject seemed to demand independent treatment, and this report is the product of first-hand investigation of the sources. I have been glad where I found others in accord with me, but if I had been prepared to follow the decisions of others, my work would have been useless. To give all credit where credit is due, I would have also to challenge the errors of fact, of interpretation and omission, an ungracious and interminable task. I cannot hope to have

escaped error ; if my errors are not those of others, I shall have accomplished something.

It is with particular pleasure that I record my thanks for help and encouragement in the course of this work, especially to Professor William N. Bates and to Professor H. Lamar Crosby, of the Department of Greek in the University of Pennsylvania, for continued and patient counsel and criticism, and to Dr. Arthur Fairbanks, of the Museum of Fine Arts in Boston and to Miss Gisela M. A. Richter, of the Metropolitan Museum of Art in New York, for generous assistance in the use of the collections in their charge.

Until we have a Corpus Vasarum and a Corpus Operum Sculptorum comparable to the Corpus Inscriptionum, an exhaustive work on Greek costume will be an impossibility. Even then we shall not be able to tell how much has been irrevocably lost ; lost either because costumes were worn that never appeared on the monuments, or because though they were shown on the monuments, these have been lost.

Since, then, the record is necessarily incomplete, and its lacunæ are due to chance alone, it matters less that certain vases or other works are unpublished or are otherwise unavailable, for provided that our source-material is large enough in amount to be representative and has been accepted as it presented itself, we shall get a representative picture of Greek costume, though it is probable that a few variant styles may be missing.

But even the available material has not yet been adequately described and the present study is merely an elementary but necessary and systematic preliminary to the discussion of the chitons as worn by Greek, and especially by Attic women, in the fifth and fourth centuries before Christ.

For this purpose I have freely set aside for the moment all evidence that was not complete and distinct, as for instance, where the essential or diacritical details are hidden under an himation or other accessory garment, or where the difficulties

of representation or the conventions of technique leave room for doubt. The problems that these examples raise will be easier to solve when we have determined the normal costumes from unequivocal evidence, while for our immediate purpose they would only cloud the discussion.

The first step has been to determine and define the form and structure of all varieties of the Doric and Ionic chitons and to set forth in orderly fashion the ways in which they were worn alone or in combination. For this purpose a preliminary search of the available material was made. This led to the recognition of seventeen distinct types of costume distributed in three larger groups or families, as tabulated in the "Artificial Key." This key enables us to designate any given costume, for the chitons are the basis of all feminine costumes, and furthermore are seen to have been made in such a variety of form and to have been worn in so many different combinations as to make their systematic distribution into classes and types essential to the second step of our inquiry. Moreover this key is designed to admit of further extension or subdivision, if need should appear.

The second step is to list by classes and types the costumes represented in each of the three important groups of source-material and to learn what we can from these tabulated results by comparing them with one another.

It was not to be expected that the three tables derived respectively from temple-sculptures, from vase-paintings and from grave-reliefs would give identical results. The temple-sculptures might be expected to represent conservative tradition, mythological and religious symbolism and iconography and also to aim at sculpturesque dignity of form and the static breadth suitable to their architectural setting, all of which tend in the direction of largeness and simplicity of detail. The grave-reliefs represent realism, or rather, perhaps, the domestic ideal. The vase-paintings include almost all the elements that are found in the other two classes, but they are pervaded by a wholly different spirit, a lightness that ranges

from decorative prettiness to unbridled license. It is here, then, that we shall look for the greatest variety of costumes, barbarian as well as Greek, fantastic as well as real, some, too, illegible or perhaps impossible, side by side with others that give the most illuminating information. If our purpose be to know what was actually worn by Greek women in the classical period, the grave-reliefs, which curiously enough seem to have been studied least, are certainly our best source. Not only does their deliberate realism assure this, since they aim at nothing but the portrayal of a scene of domestic life, but their fidelity to the minutiæ of detail (here as usually a trait of careful sculpture of the second rank), is of great advantage to us.

If the three groups of source-material had given us results that differed but little among themselves, the statistical method would have been rejected at once and the conclusion would have been inevitable that Greek costume was as uniform as has been commonly assumed, and that the goddesses of Olympus, the wives of the Athenian citizens and all their humbler sisters, flute-players, slaves, metics and all, had dressed much alike. But such uniformity is not anywhere Greek, and it is not found in the costumes. Probably modern dresses might be classified under as few heads as the Greek ; Greek or modern, there are hardly two alike. If at first there seems to be more uniformity in the Greek than in the modern, it is partly because most of our evidence tells us nothing about color and little about texture, and partly because, greatly as the Greeks loved novelty, they avoided the bizarre, the ridiculous and the monstrous in their attire, and reserved those elements as the mark of the barbarian.

It turns out that the three groups of evidence give us differences of result far too great to be insignificant or accidental ; these will be discussed later.

In selecting the material on which to base the lists, I have endeavored to utilize such collections in each of the three departments as were already in existence, easily accessible to

scholars and of considerable extent. I have then accepted all that was legible about feminine costume in these collections, rejecting further only such works as were plainly too early or too late for the period under discussion, or were outside the realm of Greek costume, but even admitting the few grave-reliefs found in the group representing general sculpture rather than incur the responsibility for too much editing of the material.

The group representing general sculpture is the Brunn-Bruckmann collection of photographic reproductions; in a few cases I have been able to verify my conclusions by reference to casts. The work of Conze on the Attic grave-reliefs has furnished the material in this field, but in some cases where he has published line-drawings or where his beautiful collotypes lack detail (a fault of the collotype) I have sometimes been able to supplement these with photographs (e. g., the stelæ of Hegeso, of Protonoe, of Damasistrate, and the standing figure with the oinochoe, No. 805 of Conze, *Die Attischen Grabreliefs*.) For the vases I have gone directly to the collections in the Museum of Fine Arts in Boston and in the Metropolitan Museum in New York.

If my choice of material seems arbitrary, I can only answer that this was inevitable, for since a complete survey of all existing material was manifestly impossible, it was incumbent on me to accept large and representative groups of monuments as they presented themselves; that none of these included examples of certain rare costumes is true,—a proof of their rarity, rather than an indictment of the sources.

How fairly I have interpreted and chosen, others must decide. Further, if I have neglected as illegible some monuments that prove later to be of interest I shall not be surprised; I do not fear that they will affect greatly the general character of my conclusions. The proportions in which the different types of costume appear in the tables based on the three sources are so discrepant that it would take much more than the addition or subtraction of a few units to alter their

meaning and validity. I have kept the Boston vase list separate from the New York vase list in order to indicate the degree of variation that may be expected between two groups of similar material, and the degree of confidence to be placed in results based on any single group of source-material.

In the costumes of Greek women of the classical period the chiton was the dress proper. Sometimes it was worn alone, sometimes other chitons or chitonia were worn beneath it. Often shawls and wraps of various kinds were worn over it, but the chiton was always present and fixes the type of the particular costume.

It appears in many forms, and the terms Doric and Ionic are used to distinguish the two great groups under which these are classified.* The experienced eye cannot fail to see

*The use of the terms Doric and Ionic to designate the two great groups of chitons is sufficiently authorized by the universally quoted passage from Herodotus (V. 87) where he says (of the women of Athens, ca. 500 B. C.), "(the Athenians) changed the costume of the women to the Ionic. For before this time the Athenian women wore the Doric costume, which is similar to the Corinthian; they changed it then to the linen chiton, so that they might not use brooches." It is clear enough from vase-paintings and sculpture alike that, with rare exceptions, the costumes to be described here as Doric, which are fastened at the shoulders with brooches or large straight dagger-like pins, are of the heavier, woolen material; those to be described as Ionic, except some of the servants' dresses, are of thinner material, which can hardly be anything else than the "linen" of Herodotus; in the sculpture it would be difficult to tell whether the coarse material of the servants' costumes is of linen or wool.

As to the meaning of the diminutives *χιτωνίσκος* and *χιτώνιον*, the former appears to mean the short chiton worn by men, and I have no occasion to employ it: the second I take to mean an under-dress or shift worn by women, and I have so used it. The arguments of Becker (*Charicles*, Excursus I to Scene XI), and the passages quoted from ancient writers in support of his views appear to be conclusive; the whole excursus on costume is still the most satisfactory study in its field. Becker's errors are manifestly due to his lack of access to the evidence of the monuments, and are easily corrected, while his painstaking search of classical literature for illustrative passages leaves little to his successors.

at a glance to which class a particular chiton belongs, but although the character of each is unmistakable, it is almost impossible to frame a definition of the difference because there is not a detail always present in the one that is not sometimes found in the other. However, the eye will not miss the fact that the Doric chiton consists essentially of two panels, front and back, even when made from one piece of material. Neither seams nor folds hide this distinctive form, and even when supplied with a sort of sleeves the Doric chiton is as Doric as ever. It never lost its original look of being a garment entered from the side, fastened by a clasp at each shoulder and a girdle at the waist. On the other hand, the Ionic chiton is a closed garment put on over the head and surrounding the body. Those who are experienced in designing or making clothes will see that this effect is connected with the general rule that the arm-holes of the Ionic chiton are in the sides of the dress, while those of the Doric are in the outer parts of the top line of the chiton. This rule has exceptions, as we shall see. The Ionic chiton was often worn as the principal garment, either alone or over another Ionic chiton, but it often appears also as a chitonion, under-dress or chemise, under either an Ionic or a Doric chiton. The Doric chiton appears alone or over an Ionic chiton; if ever worn as an undergarment, it would not show and at any rate does not appear in the monuments.

THE IONIC CHITONS.

The Ionic chitons may be classified conveniently by separating them into three groups, those that have no sleeves, those that have true sleeves, cut and fitted into true armsizes, and finally those that have pseudo-sleeves formed by girdling an unshaped garment.

In form the first two are much alike; the sleeveless kind closely resembles the modern sleeveless nightgown, flaring sometimes at the bottom to give the requisite width, but not otherwise fitted to the body. As a richly ornamented dress it

appears to have been worn alone,[1] or over a sleeved chitonion of thinner material.[2] As a sole garment of simpler and thinner material it appears for example three times on a vase of Meidias,[3] and with the neck gathered to a band on the Eos of the Pergamon Frieze.[4] Again it is found as a sort of over-dress or apron of knee length on the servant at the left of the stele of Damasistrate[5] and in an Attic vase-painting of the fourth century.[6] Still shorter it is the sole garment of a dancer on a vase in the Boston Museum of Fine Arts (No. 97 : 371). It was sometimes belted,[7] sometimes fell ungirt.[8] It is probable that some form of short, sleeveless Ionic chiton was worn as a chemise, but as any outer chiton would hide it completely we can only judge by such vase paintings of toilet-

1. *Jahrbuch des k. deutschen archäologischen Instituts* (hereafter referred to as *Jb.*), I, 1886, 232, Taf. 11; r. f. Attic vase. Berl. Mus., No. 2660. "Schöner Stil, spätere Hälfte," according to Furtwängler.
   Jb., XI, 1896, Taf. 2. Here the bodice is richly ornamented; the skirt thin and plain.
   Jb., XIX, 1904, Taf. 1, No. 4.
   Furtwängler und Reichhold, *Die griechische Vasenmalerei* (hereafter referred to as F-R), Taf. 87, 2. = Buschor, *Griechische Vasenmalerei*, Abb. 161.

2. F-R, Taf. 68, the servant adjusting her mistress' diadem; here over a long-sleeved chitonion.
   F-R, Taf. 20; over chitonion with pseudo-sleeves.

3. F-R, Taf. 30; Cf. F-R, Taf. 59.

4. Pontremoli et Collignon, *Pergame*, Pl. 8.

5. Conze, *Die Attischen Grabreliefs* (hereafter referred to as Conze), No. 410, (Pl. XCVII).

6. Dumont et Chaplain, *Céramiques de la Grèce Propre*, Pl. 8; r. f. Attic vase, = Gulick, *The Life of the Ancient Greeks*, fig. 146, = New York Metro. Mus., G. R. 1243.

7. *Jb.*, I, 1886, Taf. 11; r. f. Attic vase.
   F-R, Taf. 30.
   Pontremoli et Collignon, *Pergame*, Pl. 8. Eos.
   Conze, No. 410, Stele of Damasistrate. Servant.

8. F-R, Taf. 68; the figure cited in Note 2.

scenes as are shown in Becker's *Charicles* (from Tischbein, *Engravings*, I, Pl. 59), where a woman wears a short chiton which falls only half way down the thigh; the drawing is inadequate, but there is probably little doubt that such garments were worn. As they could not affect the external appearance, it is a matter of small consequence.

The Ionic chiton with true sleeves is in form like a plain night-dress with sleeves; it is regularly one of the costumes of servants, and there is pretty generally a hint of something barbaric or non-Greek about the garment.[9] This becomes particularly evident when it is worn by men.[10] Like the sleeveless type it is sometimes wider below than above, and to that extent is shaped to the body. Like it again, it is sometimes richly ornamented, and in such cases the neck is cut to shape.[11] As a common dress for servants it appears on the stelæ with unshaped neck, the sleeves come quite to the wrist and end in a thick hem or roll[12] and the chiton is often held

9. In the vase-paintings Medea is often sharply distinguished to the eye as the barbarian princess by the fact that she alone wears the chiton with true sleeves (F-R, Taf. 9, 38-39). Similarly the Amazons sometimes wear short chitons with true sleeves, as in F-R, Taf. 58 and 118, though as a rule the effect is emphasized by depicting them as wearing trousers also, the whole being covered with a bizarre pattern (F-R, Taf. 26-7, 28, 81, 109, 113, 116). The non-Greek effect of this type of chiton is equally noticeable when it is worn by a man, as in F-R, Taf. 70, where the sleeves belong to an under chiton, over which an outer chiton is worn. Other examples may be found in F-R, Taf. 78, 3 (where a camel is the central feature of the group) and in F-R, Taf. 79 (Paris?). It is not impossible that as worn by the servants on the grave-reliefs it added a certain touch of style to the ménage, the "native costume" introducing something different from the local and customary, or it may be distinguishing the servants from some particular locality.

10. E. g., Alexander in Hydria of style of Meidias. F-R, Taf. 30.

11. Dumont et Chaplain, *op. cit.*, I, Pl. 39.

12. Conze, No. 410, Stela of Damasistrate; the under-dress of a servant. Conze, Nos. 68 (Stela of Hegeso, servant), 71, 882, 901. Furtwängler, *Sabouroff Collection*, Pl. XV, XVI, XVII.

in place by the shoulder cord more fully described in the next paragraph.[13] It is strange that we have not more evidence for Ionic chitons with true sleeves of elbow length; it seems no less than likely that they were worn, yet evidence for them is rare and doubtful. What is perhaps an example is illustrated from an oinochoe from Athens.[14] A man wearing a long Ionic chiton with short sleeves, a priest apparently, is shown on a grave-stela, and the Apollo Citharoedus, a Roman copy from the Greek, wears such sleeves also. They are common in the Roman period.

A very characteristic form of the Ionic chiton, and the commonest, used moreover both as a dress and as an under-garment, is that in which there are neither true sleeves nor true arm-sizes, but in which sleeves of a sort are formed by girdling or over-wrapping an unshaped garment.[15] These will hereafter be called pseudo-sleeves. The arm openings are formed in the side or length of the chiton, and not, unless by exception, in its upper width, thus following the general rule for Ionic chitons. This type of chiton is made of a length of goods, usually of sheer material, the width of which forms the length of the dress; the amount of material required depends on whether the finished chiton is to have long sleeves or short. The material is first doubled near the middle of its length, and then by fastening the two parts together at certain points along the upper edge the neck-opening is left at the centre, and the outer and only seam of the sleeves is formed by joining the selvage-edges on both sides of the neck-opening. This is sometimes done by a simple seam, but

13. Furtwängler, *Sabouroff Collection*, Pl. XV, XVI, XVII.

14. Dumont et Chaplain, *op. cit.*, I, Pl. 8. The under-dress of the stooping figure.

15. F-R, Taf. 17-18; cf. The Charioteer of Delphi; Conze, No. 820; *Jb.*, XI, 1896, page 21, Fig. 2. In this instance a woman is shown in the act of putting on a chiton of this type; the absence of true sleeves is strikingly indicated.

often by a series of buttons or small, round brooches, which range in number from two[16] or three[17] to eight or more[18] on each side; they are not always of the same number on the two sleeves.[19] Sleeves formed in this way vary greatly in length; sometimes only a few inches long, at others they come below the elbow. One of the Acropolis maidens has two loops of the sleeve below the elbow and it would require eleven brooches at the same spacing to reach the shoulder; they are hidden above by a cloak that covers the upper arm.[20] The open side of the chiton is then sewn up to within four or five inches of the top, so leaving an arm-hole. On the other side an equivalent slit is cut to make the other arm-hole. The arm-holes were sometimes left in the upper line of the garment, as may be seen in many vase-paintings, but examination of the monuments, especially of the stelæ, shows that they were often certainly on the side and practical experiment shows that to make them along the upper line throws a great excess of material, at least half a yard extra, under the arms, where there is already more than enough. Still it was certainly done in some cases; especially it may have been done on the closed (left) side of the chiton to avoid cutting and hemming the arm-hole.[21] The treatment of the forward or outer seam of the sleeves is varied. The practical problem

16. Conze, No. 290; right arm of the seated figure.

17. Conze, No. 887.

18. Bulle, *Der Schoene Mensch im Altertum* (hereafter referred to as *Sch. M.*), Taf. 122. Nereid from tomb at Xanthos; eight buttons, though the sleeve comes only half way to the elbow.
The Penelope of the Vatican, Brunn-Bruckmann, *Denkmäler der griechischen und römischen Plastik* (hereafter referred to as B-B), No. 175, shows ten or eleven buttons to each sleeve.

19. Conze, Nos. 290, 429.

20. Schrader, *Auswahl archäischer Marmor Skulpturen im Acropolis Museum*, Fig. 1.

21. Conze, No. 820.

was to make the sleeve shorter along the seam than at the back or under side. To accomplish this, the material is gathered here, either along the continuous seam where that is used,[22] or where brooches are used, a group of gathers or plaits is taken up under each brooch.[23] Thus instead of a seam, there is in this case a series of loops through which the arm is visible. A sleeve thus often shows a diagonal line as seen from the side,[24] so that when it was of elbow length it fell to the bent fore-arm in front and to the point of the elbow at the back, unless indeed the arm hole was so small and fittted the arm so tightly that it could not assume the diagonal line.[25] Where the sleeves reach only half way down to the elbow the straight-across effect is favored and the sleeve is rather tightly fitted to the arm,[26] and but little material is taken up in gathers at each brooch. Occasionally the last brooch is a little above the bottom of the sleeve. In these cases the right angles in the material at the end of the sleeve are a positive proof that the arm-holes are in the sides of the chiton.[27]

The neck opening also presents variety of treatment. Often it was simply made without cutting, measuring a few inches more in front than in back, thus fitting close across the back of the neck, holding the garment in place, while the greater fullness at the front gave room for the deeper curve of the chest and at the same time produced a characteristic tri-

22. F-R, Taf. 64; cf. Charioteer of Delphi.

23. Stela of Hegeso. Conze, Nos. 290, 448 (especially clear), 887, and abundantly elsewhere.

24. Conze, Nos. 805, 887.

25. Conze, Nos. 71, 320.

26. Conze, No. 71.

27. Conze, No. 1131, Stela of Protonoe, standing child; No. 145, left arm of seated figure. Compare the "Jeune Fille au Canard" (probably of third century), in Furtwängler, *Sabouroff Collection*, Pl. XXXV.

angular fold just below the throat.[28] On the other hand, even from an earlier period, as abundant evidence shows, the neck was cut and fitted to a band or braid.[29] Sometimes the braid was carried along the length of the sleeve and even around the arm.[30] It has been urged (Abrahams, *Greek Dress*) that the braid passing around the arm was really a pattern woven in the goods rather than a braid, and that therefore the arm-holes were made in the same line as the neck opening and the sleeve-length, but sometimes the braid must be an addition, since the sleeve is gathered beneath it, but the braid itself is not gathered.

The Ionic chiton of this type was frequently worn as an under-dress or chemise beneath another chiton, either Doric or Ionic, but where it was worn alone or with a cloak only, the sleeves were often defined and the excess fullness kept out of the way by a cord or fillet which was passed vertically from shoulder to arm-pit in front and then diagonally across the back from arm-pit to the opposite shoulder. This is the shoulder cord mentioned above as being used to hold the sleeved chiton in place, but it is used even with the sleeveless type. It can be clearly seen in sculpture as a cord or fillet,[31] and as a dark cord in many vase-paintings.[32]

28. Stela of Hegeso. Conze, No. 887.
29. F-R, Taf. 64, Sappho. F-R, Taf. 94, three figures on Boreas vase. F-R, Taf. 95, one female and two male figures. F-R, Taf. 106, Demeter.
Schrader's *Auswahl*, Fig. 6, Acropolis maiden, (No. 682, Acr. Mus.); Fig. 11, (No. 675, Acr. Mus.); Fig. 43, (No. 670, Acr. Mus.)
30. F-R, Taf. 64, Sappho.
31. Furtwängler, *Sabouroff Collection*, Pl. XV, XVI and XVII, and Conze, No. 71, with true sleeves.
Sch. M., Taf. 122, Nereid from Xanthos with pseudo-sleeves. Compare also the Charioteer of Delphi and the Jeune Fille au Canard, Furtwängler, *Sabouroff Collection*, Pl. XXXV.
32. F-R, Taf. 30 (where it is shown with sleeveless chiton and with pseudo-sleeves). Also F-R, Taf. 8 (five times), 59, 68, 79.
Jacobstahl, *Göttingen Vasen*, Taf. 15. *Annalli dell'Inst.*, 1876, Tav. d'agg. DE.

When the Doric chiton was worn over the Ionic, as shown in numerous stelæ, it is impossible to tell whether this fillet was worn or not; practically the outer chiton is sufficient to hold the chitonion in place and to form the sleeves. However, in many stelæ and vase-paintings, even when there is no outer chiton, there is no sign of such an arm-band.[33] In some, where a cloak is worn, the fullness of what should be a sleeve shows that it is not held in under the arm,[34] and in yet others there is no hint of a sleeve.[35] That the cord does not always show, even when the folds of the material denote its presence is due in some cases to the fullness of the material, in others to the slenderness of the cord. How thin it sometimes was may be seen in the group of the so-called Fates from the east pediment of the Parthenon. Here we have one figure reclining against the other; the one reclining wears an Ionic chiton with pseudo-sleeves but no shoulder cord; in front of the lower shoulder this is perfectly clear. The seated woman, against whom she leans, wears a similar chiton with the cord, as is shown by the grouping of the folds and the deep channel cut by the cord, but the cord itself is not more than one-sixteenth of an inch in diameter on a figure of heroic size. It is small wonder, then, that in the vase-paintings it is often indicated only by its effect on the folds of the chiton.

A girdle usually appears at the waist,[36] but is sometimes absent.[37] With reference to some chitons of this class a question is raised by certain of the vase-paintings. In these, although the neck opening and the upper line of the sleeve are in one straight line and there is no evidence of anything like

33. Conze, Nos. 290, 820, 887. F. R., Taf. 17-18. *Journal of Hellenic Studies* (hereafter referred to as *J. H. S.*), XXXII, 1912, Pl. 7-8; XXXIII, 1913, Pl. 10-11.

34. F-R, Taf. 17-18.

35. *Jb.*, XXIX, 1914, 144, Abb. 18.

36. F-R, Taf. 30.

37. Conze, No. 820.

a true sleeve such as we find elsewhere, nevertheless there does not seem to be enough material beneath the arm or beside it to indicate a merely oblong chiton. It would be easy enough to explain these paintings by assuming that the excess material had been cut away, leaving what the dress-makers of to-day call kimono-sleeves. The evidence is entirely circumstantial, but it is in some cases almost convincing; e. g., the chiton on the dancing figure on the r. f. vase in the Metro. Mus., N. Y., G. R. 1120. Still it is disconcerting to find the two sleeves on one garment so differently portrayed that one looks semi-shaped, while the other is as full and loose as in any unmistakable example of the oblong chiton; e. g., Metro. Mus., 227.16. For the present the matter may rest unsettled; in any case there is no true sleeve ln question, and at most a sub-division of Class Ic may be required.[38]

THE DORIC CHITONS.

The Doric chitons are all variations of a single, simple type. The simplest form is a garment of two panels, formed by folding a piece of material five or six feet square on a line near the middle and then fastening together the panels so formed by two brooches placed to define the neck opening; these rest on the shoulders and support the chiton. When, as was frequently the case, the open side of the chiton was closed by a seam, its upper edge was thus divided into three loops, one in the centre for the neck and the outer ones for the arms. When the open side remained open, or was sewn only part of the way up from the lower hem, the only difference was that one arm opening was incomplete; the loop was broken beneath the arm.

That the Doric chiton is essentially a development from the rectangular cloak is evident enough from one of the ways

38. This type of chiton is sometimes worn by men; e. g., Triptolemos, Hydria at Munich, F-R, Taf. 106; Croesus, Amphora in Louvre, F-R, Taf. 113; Dionysus, Crater in Munich, F-R, Taf. 7.

in which the himation was worn, even in the fifth century. A vase in Boston[39] shows an himation worn over an Ionic chiton. The upper third of the himation has been folded down, forming a regular Doric overfold. The cloak has then been folded around the left side of the body, exactly as the Doric chiton is regularly folded. It passes under the left arm, however, and is fastened rather tightly by a brooch on the right shoulder. If it were not quite so tight and there were a second brooch on the left shoulder and a girdle at the waist it would be a typical Doric chiton with overfold; as it is, it is an himation, lacking only a girdle to make it an ἐξωμίς; unlike the ἐξωμίς of the men it leaves the left shoulder exposed instead of the right.

One or two facts about Doric chitons in general may as well be noted here. The back panel is regularly brought forward over the front panel at the points where they are fastened together with the brooches. Exceptions to this rule are found, but they are rare.[40] It is a matter of convenience to the wearer in adjusting the chiton that the brooches should fall, as always shown, within easy reach on the forward part of the shoulder, on the line of the collar-bones. Experiment shows that two panels of equal length normally overlap at this point. The brooches are usually like large, round buttons, sometimes two inches or more across,[41] though usually less, but sometimes they appear as long, straight pins.[42] The material is often plaited under the brooches; this gives fullness for the breast and produces a group of characteristic folds beneath each shoulder.

As a sole garment, the simplest form of Doric chiton,

39. Mus. of Fine Arts, 00.347.

40. Baumeister, *Denkmäler des classischen Altertums*, I, 343, Abb. 361. = B-B, No. 58; Relief from Pharsalus.

41. F-R, Taf. 77, 1.

42. F-R, Taf. 17-18, 66b. Abrahams, *Greek Dress*, Fig. 13.

without overfold, ungirt, is seen on the "Maiden of the Palatine;"[43] with a girdle, it is worn, for example, by a figure found on the Acropolis at Athens.[44] When thus girt it is generally shown, as here, with the excess length drawn up through the belt to form a kolpos. In many cases this kolpos is not full enough to hide the girdle, especially when it is high under the breasts. This type of Doric chiton with the neck cut and fitted to a band is common later; the Persephone in the Pergamene style, now in the Capitoline Museum, shows it well.[45]

As an overdress above an Ionic chiton or chitonion, this very simple Doric chiton forms one of the favorite costumes of the well-dressed Athenian lady of the period of the grave-stelæ.[46]

The next group of Doric chitons is marked by the presence of the overfold. This is a feature wholly Doric, not occurring in any Ionic chiton. It is made by taking a piece of material wide enough to allow for a broad fold to be turned down from the top before it is folded in the other direction to make the two panels. In one type the overfold reaches to the waist or a little lower, and the girdle or the kolpos shows below it; in another type the overfold is much longer.

As a sole garment, the Doric chiton with the short overfold, one coming about to the waist line, is one of the commonest forms of costume in sculpture and in the vase-paintings of all periods. Some of the archaic "Acropolis maidens" wear it,[47] and it is frequent on black figured vases.[48] Somewhat later Athena wears it in the Augean stable metope from the temple of Zeus at Olympia; so does the Hesperid of the Atlas metope and the Sterope of the pediment. As in the

43. *Sch. M.*, Taf. 125.
44. *Sch. M.*, Taf. 128.
45. *Sch. M.*, Taf. 135.
46. Conze, Nos. 67, 71, 109, 239, 297, 304, 337, 448, 718, 805, 852, 1131.
47. *Sch. M.*, Taf. 112.
48. F-R, Taf. 13.

group of chitons previously mentioned, the kolpos may or may not be full enough to hide the girdle, and the overfold may or may not cover both; in the Atlas metope the kolpos is hidden by the overfold; in the Augean stable metope it shows beneath it. The caryatids of the Erechtheion wear this type of chiton, here somewhat fuller and less severe in line; as a rule the later ones are more ample than the earlier; the Eirene of Cephisodotus shows a characteristic example of the later form. A chiton of this sort, almost as ample in its proportions, is worn by a servant in one of the stelæ,[49] but this particular type is rather rare on the grave monuments.

In many cases, especially when worn by goddesses and the women of mythology, the open side of the chiton is held together by the belt alone; the open side is rarely the left,[50] usually the right.[51] Often, the open side has been closed by a seam; in vase paintings and reliefs it is often impossible to do more than guess from the way the dress falls as to whether it is closed or not.

As an outer dress it appears over an Ionic chiton with pseudo-sleeves on a sculptured column-base from the temple of Artemis at Ephesus, now in the British Museum, and on several grave-reliefs.[52]

We come next to those Doric chitons in which the overfold no longer falls only to the waist or the hips, but comes well down on the thigh, sometimes nearly to the knee.[53] The appearance of this garment is greatly modified by the gird-

49. Conze, No. 280, with note in text; cf. also *J. H. S.*, 1884, Pl. XXXIX.

50. Baumeister, *Denkmäler des class. Altertums*, I, 381, Abb. 417.
The caryatid of Crito and Nicolaos, B-B, No. 254, wears a chiton of Type IIc2 open at left side.

51. *J. H. S.*, XXXIV, 1914, 190, Fig. 9.
F-R, Taf. 79 (figure with fan); Taf. 66b (Eriphyle).
Abrahams, *op. cit.*, Fig. 13.

52. *Sch. M.*, Taf. 286. Conze, Nos. 74, 1088.

53. On the Artemis of the collection in the Villa Albani at Rome, the overfold falls well below the knees. (Brunn-Bruckmann, No. 606).

ling. As a sole garment, not overgirt, it is not common, though yet not rare.[54] Probably the long overfold was rather clumsy unless belted in. A stela from Thespiae (see note 54) is interesting as having the overfold cut to a point in front. Simply overgirt it forms the peplos of Athena, and can be studied on the Mourning Athena, the Athena of Myron, or the Lemnia. As an over-dress, still simply overgirt, it is worn by the Athena Medici, and often by young girls on the stelæ.[55] Still oftener, however, they wear this costume with a girdle that not only passes around the waist, but also crosses the breast diagonally from both shoulders to the waist, and at the crossing of the fillet in the middle a large button or amulet is worn.[56]

In the Doric chitons of the types hitherto mentioned, the length and breadth of the material used varied greatly, and with it the fullness of the dress. If, for instance, we compare the chiton with overfold as we see it in the black figured vases and on the Acropolis maidens, evidence dating from before the Persian wars, with the Eirene of Cephisodotus of the fourth century, in which the length of the material used is so great that the arm-loop hangs down to the level of the hips, a rough calculation shows that there is about one and three-fourths times as much length to the one as to the other, while the larger overfold and the deeper kolpos call for a width at least one and one-fourth times as great, a total area more than twice as great. In fact, the arm-loop of the Eirene is so large that two or three clasps might have supported it

54. *Encyclopedia Britannica*, 9th Ed., Vol. XIX, Pl. V. = Rayet et Collignon, *Hist. de la Céramique Grecque*, 255, Fig. 96.
F-R, Taf. 40.
Jb., XXVI, 1911, 35. Artemis Colonna.
Jb., XXVIII, 1913, 322. A stela from Thespiae (Stela of Polyxena).
Jb., XXIX, 1914, 29-30 of *Arch. Anz.*, Dresden Artemis.

55. Conze, Nos. 876, 896, 906.

56. Conze, Nos. 332, 832, 875, 1131.

along the arm and still have left a sufficient space for the arm-size at the end. In the stela of Melite[57] we see that this was actually done, no doubt greatly to the comfort of the wearer, who thus had more points of support for the fashionable amplitude of her dress. Moreover, we have a whole series of similar chitons, which all present the curious effect of having sleeves from which an overfold hangs, front and back.[58] They are represented as having two, three or more clasps on each side. They also show an interesting contrast in the length of kolpos and overfold. This type of Doric chiton is not only interesting in itself, but it may help to explain a much disputed kind of chiton shown in certain vase-paintings, notably those by the painters Brygos and Hieron.[59] Here we find both the overfold and the sleeves with many brooches, but the overfold reaches only from shoulder to shoulder, instead of being as wide as the entire chiton. An effect like this may be obtained by taking a chiton like that of Melite and cutting off so much of the material as forms the overfold along the arms; that is, a rectangle as deep as the overfold and as wide as the sleeves on both sides, front as well as back. Miss Abrahams[60] holds that cylindrical sleeves have been added to the usual straight chiton and further makes an alternate suggestion that the overfold was added to a regular plain Ionic chiton. The evidence is not conclusive, and she may be right.

The chiton worn by Melite is, in spite of its extra brooches, as Doric as that of the Eirene; those worn by the maenads of

57. Conze, No. 803.

58. *Jb.*, XI, 1896, 29; 188, Abb. 30d.
Savignoni, *Vasi dipinti nel. Mus. d. Villa Giulia*, Fig. 8.
Harrison, *Prolegomena to Greek Religion*, Fig. 76, after Milliet et Giraudon, Pl. 104.
Klein *Vas. Liebl. Inschr.*, 94, Fig. 24.
B-B, No. 200 (Athena Giustiniani).

59. Buschor, *Griechische Vasenmalerei*, Abb. 127.
Abrahams, *op. cit.*, Fig. 29.

60. *Greek Dress*, 65 ff.

Brygos and Hieron are in general appearance far more closely related to the Ionic in spite of the overfold, which is, of course, a feature belonging to a garment of two panels, rather than to a cylindrical dress. This Ionic look is partly due to the fullness and transparency of the material of which they are made, which is clearly not wool. Naturally these chitons are sometimes described as Ionic with an overfold attached. Whether they are to be regarded as Doric or Ionic, it is certain that they have characteristics that belong in part to the primary types of each. It is evident that with both kinds of chitons worn side by side, and with an increasing variety of materials at hand, when the traditions that had once existed had grown old-fashioned in the new freedom of the late fifth century, such hybrid forms would be produced, provided only that they offered novelty of fashion or comfort and convenience to the wearer. And this is what actually happened. In attempting to classify them it becomes necessary to adopt, more or less arbitrarily, some principle, and either to recognize that Doric chitons were sometimes made of linen or cotton, and even had sleeves of a sort, or that the Ionic were sometimes furnished with the overfold. In such a quandary, structure is probably a safer guide than material. The clear case of an intermediate form, the Melite chiton, is proof of a kind of evolution from the Doric, and although it is not necessary to assume in design the closely successive steps that are to be expected in biologic evolution, yet when they exist they are unanswerable.

Another Ionized Doric chiton is closely related to those just mentioned. If the ordinary Doric chiton with short overfold should be made of thin material too narrow to permit making arm-holes in the upper line, and these were made in the side of the garment, and if further, instead of a brooch at each shoulder, a short seam took its place, we should have a true, sleeveless Ionic chiton in everything but the overfold. Here we have a garment, which, if it occurred alone, would infallibly be classified as Ionic, but in view of the overfold

and its kinship with the other more Doric hybrids, must be grouped as Doric with them. It is quite rare, but may be studied on a vase of Meidias,[61] where there are three clear examples.

An example of the sort of costume that raises unsolved problems is shown by Kalkmann,[62] who discusses it and concludes that it consists of a chiton of thin material (which shows at the sleeves and at the feet only), on which three flounces of a richly patterned material have been sewn, one of which falls almost to the hem of the foundation garment, one to the hips, and one to the waist, thus explaining the three ornamental borders, which cannot belong to any regular type of Doric chiton. Miss Abrahams holds, rightly, I believe, that the sleeves and the similar material at the feet belong to an under-chiton, while the rest is an over-dress. She believes that the over-dress is a Doric chiton with a deep overfold, ungirt, with "a short, false overfold to the waist, sewn on over the real one at the neck" (*Greek Dress*, p. 96). I suggest that the false overfold may be an entirely separate, accessory garment, a rectangle of cloth with a circular hole cut in the centre, put on after the clasps of the Doric chiton were fastened; (they do not show, be it observed, nor do we see the overlapping of the two panels, as we should if this uppermost piece were an integral part of the chiton). The evidence for this chiton is slight and uncertain, and it has no bearing on our subject, but there is direct and positive evidence for such a garment as I mention.[63]

It is worth consideration that the unsolved problems oftenest arise from evidence derived from primitive work in sculpture and from vase-paintings; rarely from sculpture of any kind from the fifth century or later. In sculpture, representation is based upon a simple repetition of observed forms; in painting, and especially drawing, representation is accom-

61. F-R, Taf. 8.

62. *Jb.*, XI, 1896, 26 f.

63. *Jb.*, XXIX, 1914, 133, Abb. 7.

plished by means of a highly developed and arbitrary system of symbols, conditioned by the determination to represent solids on a surface and textures, shapes, colors and shadows, by lines, which nowhere exist in nature. And when this has been done lightly and to obtain an effective design rather than a deposition of archæological evidence, we must not cross-question it too closely. For example, we must not assume, because the same pattern at the same scale appears at two places on the costume of a figure, that they belong to a single garment; this certainly applies to the neck-border of the chiton and the border of the himation on the Briseis of the Euxitheus vase shown by Miss Abrahams, *op. cit.*, Fig. 16, and it may well apply also to the "false overfold" or "poncho" [or may we say *κύφων*, yoke(?)], referred to on the preceding page. Nor must we assume, because at one place there are many fine lines to represent fine folds in the material of a garment, while at another place there are none, that there are two garments, one of fine material and the other of heavy. Clearly in F-R, Taf. 14, Hector wears a single chiton over which he is fitting his corselet; here the fine lines appear all over the chiton, but are far more numerous on the upper part. In F-R, Taf. 82, again we have an arming-scene. Here the chitons are precisely similar to that of Hector except that they are girt, but the faint lines appear only above the belt. In the Hector picture, Hecuba seems at first sight to have some sort of loose sweater to the waist, but after careful examination of this and other vase-paintings I am convinced that there is here but a single chiton, and that the artist tried to indicate the difference between the distinct folds of the skirt and the loose fullness of the kolpos by this convention. In this connection it ls worth while to compare the figures on the Euphronios vase, F-R, Taf. 23, especially that of the woman fastening her belt, on the inside of the cup.

Such are the chitons; the key on the next page shows the costumes that they form, alone or together, in combination, of course, with various accessory garments.

AN ARTIFICIAL KEY TO THE TYPES OF GREEK COSTUME.

(In this key no account is taken of the himation).

	Sculpture.	Vases, Boston.	Vases, N. Y.	Grave-reliefs.
I. Ionic chiton alone present.				
a. No sleeves,	4.3	8.0	10.0	0.0
b. True sleeves,	3.1	0.0	0.6	8.0
c. Pseudo-sleeves,	22.1	65.6	65.4	26.1
II. Doric chiton alone present.				
α. True Doric chitons with one clasp on each shoulder.				
a. Overfold wanting,	13.5	2.6	0.6	1.1
b. Overfold short,	27.6	6.7	8.0	3.4
c. Overfold relatively long.				
1. Not overgirt,	4.9	1.8	3.1	1.1
2. Overgirt,	13.5	10.4	7.4	1.1
β. Doric chitons with two or more clasps on each side; the clasps sometimes replaced by a seam; overfold present.				
d. Overfold to end of pseudo-sleeves,	0.6	1.8	1.8	2.3
e. Overfold not extended to sleeves,	0.6	0.0	0.6	0.0
γ. Doric chitons with short seam at shoulder; overfold present.				
f. Overfold notably short,	0.6	0.0	1.2	0.0
III. Ionic chiton or chitonion with over-dress.				
a. Over-dress Ionic chiton without sleeves.				
1. Over-dress to knees,	1.2	2.6	1.2	2.3
2. Over-dress to feet,	0.0	0.0	0.0	0.0
b. Over-dress Doric chiton without overfold,	3.1	0.0	0.0	39.8
c. Over-dress Doric chiton with short overfold,	2.5	0.6	0.0	2.3
d. Over-dress Doric chiton with long overfold.				
1. Girdle wanting,	0.6	0.0	0.0	0.0
2. Girdle simple,	1.8	0.0	0.0	6.8
3. Cross-girdle,	0.0	0.0	0.0	5.7
	100.0	100.1	99.9	100.0

SCULPTURE LIST.

(Brunn-Bruckmann).

No.		I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
14	Aphrodite at Epidauros			1															
15	Reliefs, Theatre, Athens					2		1											
19	Nereid from Epidauros										1								Probably; see Abrahams,
20	Amazon from Epidauros	1																	Probably [*Gr. Dr.*, p. 64
33	Reliefs, Erechtheion					1													Almost certain
34	Balustrade, Athena Nike					1													
35	Sandal Nike			1															
38	Lenormant Athena							1											
39	Varvakeion Athena							1											
43	Eirene and Ploutos					1													
52	Column-base, Ephesus			1															
59	Diana of Gabii			1?															Probably
62	Asclepius relief						1												
68	Athena of Velletri					1													
85	Nike of Samothrace							1											Probably
86-88	Frieze, Phigaleia				1	2		1											
96-100	Frieze, Mausoleum				10														
108	Parthenon, East Frieze					1		1											
110	" " "					1													Almost certain
123	Artemis, Munich															1			
149	Dresden Athena																1		Probably
167	Ariadne, Rome				1														Apparently

SCULPTURE LIST (*Continued*).

(Brunn-Bruckmann).

No.		I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
168	Ariadne, Florence				I														Apparently
171	Athena Medici																I		
172	Demeter, Vatican							I											
173	Pilaster, Ephesus							I											
175	Penelope, Vatican			I															II brooches on left arm
176	Caryatid, Erechtheion					I													
177	Caryatid, Rome					I													
189	Pediment, Parthenon					2													One overgirt
190	" " ("Fates")			2						I									
200	Athena Giustiniani								I										
211	Nereid, Xanthos							I											
212	" "			I															
213	" "							I											
228	Leucothea relief			3															
232	Stela of Philis			I															
242	Artemisia			I															Apparently
251	Artemis, Vatican						I												
252	Maenad, Vatican				I														
253	Athena of Antiochus							I											
254	Caryatid							I											
255	Female statue			I															
260	Daphne Borghese				I														

SCULPTURE LIST (*Continued*).

(Brunn-Bruckmann).

No.		I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
261	Female statue					I													
263	" "						I												
266	"Thusnelda"						I												
290	Metope, Selinus, Artemis														I				
294-5	Dancers, Herculaneum					6													
299	Victory of Brescia				I														
308	Ildefonso group																I		
311	Niobe	I																	
312	Niobid		I																
330	Athena							I											
341	Eurydice					I													
342	Two reliefs			I		I	I								I?				? Perhaps IId
347	Amazon	I																	
357	Female statue					I													
358	Goddess, Rome					I													
359	" "				I														
360	Flora Farnese				I														
406	Theseum frieze			I		I													
415	Supplicating Girl			I															
417	Archaic Stela					2*								I†					* One perhaps doubtful
436	Stela of Hegeso		I	I															[† Probably
439	Two reliefs	I		3		I													

SCULPTURE LIST (*Continued*).

(Brunn-Bruckmann).

No.	I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
442-3 Metopes, Olympia					3													
444 Victory of Paeonius							1											
447 Sterope (?), Olympia					1													
448 Hippodameia, "					1													Front panel over back at
452 From T. of Zeus, "					1													[one shoulder
455 " " " " "						1												
464 "Hydrophorus" Stela; Conze, No. 805													1					
468 Base of group by Praxiteles			3										2					Possibly IIIc
473 Aphrodite				1														= *Sch. M.*, 124. See my
474 Maiden of Palatine				1														[note on cast
475 Cephisophon relief					1													
476 Themis			1															Perhaps Ib? Character of
484 Athena, Pergamon							1											[sleeve?
491 Hestia Giustiniani					1													
492 Hera Barberini					1													Arm-loop folds denote overfold
502 Athena, Madrid														1				Notable example; chitonion
" " Rome					1													[sleeves gathered to seam
511 " Madrid							1											
512 " Paris							1											
516 Relief, Rome			1															
518 Stela of Procleides													1					Probably

SCULPTURE LIST (*Concluded*).

(Brunn-Bruckmann).

No.		I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
520	Young Girl	I																	
533	Early Attic reliefs					2		I											
534	Mourning Slaves		2									I							
536	Figure from Eleusis							I											
537	Female statue			I															
538	" "			I															
548	Relief from Eleusis			I		I													
577	Goddess			I															
578	Venus Callipyge	I																	
583	Maiden of Antium	I																	
585	Victory							I											Probably
598	Fragments of reliefs		I	I			I												Hellenistic. See B-B text
606	Artemis, Villa Albani							I											
636	Cybele			I															Apparently
640	Draped figure			I															
646	Two Amazon reliefs				I							I							
654	Three Graces			I*		I									I				*Probably
663	Running Maiden					I													
664-5	Female torso				I														
669	Athena, Rome							I											
673	Two female figures			2															Both of uncertain date;
679	Greek votive reliefs					I	I												[one surely late

VASE LIST.

(Museum of Fine Arts, Boston).

		I			II							III							
Case	Cat. No.	a	b	c	a	b	c1	c2	d	e	f	a1	a2	b	c	d1	d2	d3	
14	95.35			3															Cylix. Flap sleeves. Two illegible; probably Ic
	00.334			3															Kantharos by Nikosthenes. Pseudo-sleeves?
	13.204			I															Cylix. Maenad with serpent. Flap sleeve.
	01.8022			7															Cylix. Chitons surely alike; different views. Important.
18	98.887			6															Pyxis; six muses; white ground. All apparently Ic
	00.499 under side			6?															Cylix by Duris
	15.1353			I															By Duris; under side much injured; shows six apparent examples of Ic
	95.63			I															Cylix. Peleus and Thetis. Inside.
	91.223			I			3*					I							Cylix. *One on inside.
	99.539 under!			2		2		I											Hard to see. Birth of Helen.
	00.344 inside							I											Cylix by Aristophanes and Erginus
	01.892 under							2											Campanian cylix (Cumae)

VASE LIST (*Continued*).

(Museum of Fine Arts, Boston).

		I			II							III							
Case	Cat. No.	a	b	c	a	b	c1	c2	d	e	f	a1	a2	b	c	d1	d2	d3	
24	95.231			3															Krater. Apparently; not very clear
	00.346			3															Krater. Apparently.
	00.342			1		1*													Krater. *Probably; ill drawn!
	98.878			1															Flap sleeves. Ill drawn
	95.21			1															Amphora; women bathing
	00.347			4															Pretty surely. Note one with chlamys!
	95.25			2															Krater
	95.40			1															Lecythos; woman leaning over basket. Good!
	93.103											1?							Lecythos
	03.104			1															
	01.8077			1															
	P.9066																		
	00.340			1															
	13.189			1															Woman seated by basket
17	90.156			1					3*										* Two clasps each shoulder, ca. 3″ apart. In one case the overfold to mid-thigh, overgirt; in the other two to waist only
	P.6090																		
	01.8031			6															Some with sleeves in loops: some on seam, pattern carried around.
	P.9020																		
	08.417			2															

VASE LIST (*Continued*).

(Museum of Fine Arts, Boston).

		I			II							III							
Case	Cat. No.	a	b	c	a	b	c1	c2	d	e	f	a1	a2	b	c	d1	d2	d3	
17	03.786			1															Flap sleeves
	01.8083a & b P.9072	1*		3															*Almost certainly
	01.8032 P.9021							1											Half length figure
	01.8082a & b					1													Of thin material. Peculiar, but almost certain
	01.8097			1															Woman carries well-drawn infant
	98.881			1															Possibly IId
	98.880			1															Almost certain
20	97.370			1															
	95.20			1		1*													*No pin or overlap at shoulder; possibly IId, or f (?)
	01.18							1											Practically certain, though kolpos looks like an overfold. Drawing notably poor throughout
	76.43			1															
	01.16			1															A second figure probably wears similar chiton
	90.157											1							Probably. Servant; under chiton has loose sleeves (pseudo)
	76.44	1		1								1							

VASE LIST (*Continued*).

(Museum of Fine Arts, Boston).

Case	Cat. No.	I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
20	91.224					1													Not girt
	01.8028																		Sleeves as in 00.499
	91.225			?								*.........						.........*	*Girl putting outer chiton on: chitonion in place!!
	00.357					1													
	03.791			?															Probably
23	96.719														1				Sure
	90.155a & b			7															
	03.792					1		1											
	95.22							1											
	03.817			1															
	98.934							1											
	10.183	2																	One marked Doric on catalogue-card
	00.352	1			1*														*Almost sure
	95.49			3															Practically certain
	95.1402	2																	Servants: arm-cord in black
	95.26	4																	Almost beyond doubt; possibly IIa (?)
	00.348				3														Athena. Two maenads. Of thin material; one might be Ia
	89.274			1															
	76.50			1															
19	(Lecythoi)																		
	95.65							2											One scarlet, one white (catalogue-card)
	93.105			1*				1†											*Bright red, himation. Chiton, pink stripes. †Bright red

VASE LIST (*Concluded*).

(Museum of Fine Arts, Boston).

Case	Cat. No.	I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
22	94.126 Lecy-							1											
	95.46 thoi			3															Almost like short, true sleeves
	Loutrophorus			2*		1													*Other figures not legible
	UPSTAIRS																		
	13.186 Hieron			?						?									No: probably type Ic very wide. Two [girdles
	13.186 Makron									5 or 6									In all probability
	95.28 (?) Eos			1															
	13.195			1															Looped: like real sleeves (?)
	13.188			1															Seam
	Thetis patera(poor)			1															
	03.816			1															
	10.185			1															Actaeon Krater
	95......			1				1											Small lecythos. Third figure invisible
	13.187							1											Servant; costume usual for s. on lecythoi
	13.201			1*				1†											Lecythos. *Yellow, dark cloak. †White, on servant
	00.356			2*		1†													Covered cylix. *Underneath. †Red
	97.371 (Phiale)	1*		1		1													*Not to knees
	13.197							1?											
	13.202	1																	Doubly girt
	?			1															Brygos cantharos. Flap sleeves
	Large Krater			2															

VASE LIST.

(Metropolitan Museum, New York).

Room	Case		I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
V. C., First half																				
4	J	13.227.16			1															Flap sleeves
	E	06.1021.169			1															Flap sleeves. Maenad
	E	G. R. 598			1															Seam w. pattern from neck to arm size
	E	06.1129					1													No brooch shown, but almost certain; IIf?
	F	07.286.84			2															Krater. Figures on neck, back; one [seam, one looped
	N	G. R. 570			2		1		1											
	N	06.1021.115			1															
	N	G. R. 580			1															
	O	07.286.81					1													
	O	08.258.21			2*		1								†					*Probably. †Possibly, Artemis, quite [doubtful
	O	06.1021.144			1															
	O	12.236.2			1															
	O	G. R. 1244			3							1*								*Probably
	O	12.236.1			2															
	Q	06.1021.140			1															
	Q	07.286.74			4								1*							*Perhaps
	M	06.1021.128			1															
	M	06.1021.126			1															
	M	06.1021.125			1															
	M	06.1021.134						1												Excellent!
	L	G. R. 577								1										Important

VASE LIST (*Continued*).

(Metropolitan Museum, New York).

Room	Case	I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
V. C., First half																			
4	L 06.1021.166			1															Badly drawn!
	L 06.1152			5															Maenads
	L G. R. 1120			1															Flap sleeves
	K 06.1117			6															One not sure, but looks like the rest
	K 06.1021.146			1															
	S 06.1021.152			1															Maenad
	S 06.1021.167			10															
	S 07.286.51			1															
	S 07.286.78			1															Artemis; all above waist shows no folds
	V 07.286.36			2*		1													*One doubtful; the figure with Eros. Double kolpos or double girdle?
V. C., Second half																			
5	B 06.1021.175	1				1													Both probably; drawings small, not clear
	B G. R. 588			2															
	B 16.73			5*			1	2†	2‡										*Probably. †Of thin material. ‡Victories
	B 07.286.35			3		1	1	1*											*Thin material
	C G. R. 1243			1								1							
	C 11.213.2	2		1															
	C 06.1021.181		1			1		1*											*Very wide, dark border. Note Ib!
	C 09.221.40	1		2		1		2			1*								*Not certain

VASE LIST (*Continued*).

(Metropolitan Museum, New York).

Room	Case	I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
V. C., Second half																			
5	E 07.286.85			4*		I													*Have two overfolds or two kolpoi; doubtful
	F 08.258.19				I														Pretty sure
	F 06.1021.131							I											"Partly repainted"
	G 09.1021.123	I		I			I												Bad drawing, but clear
	G 15.25			2		I	I	I											Toy ΓΑΜΙΚΟΣ ΛΕΒΗΣ. All pretty sure, not well drawn
	G No card	4																	Two show crossband, crossing in front
	G 06.1021.111			I ?															"Crescent sleeves" beyond hands
	G 06.1021.122	3																	Heavy bodice, thin skirts
	G Lecythos							I											Recent purchase
	J 07.286.66			3															One not quite sure
	J 06.1021.176			2															
	J 17.230.15	2		I				I											Hydria. Recent purchase
	J 06.1021.178	I*		4		2													*Or possibly IIa. Thin material
	— 06.1021.116			2															Third figure must be studied
	Q G. R. 610			I															
	Q G. R. 596			I															
	Q G. R. 609			3															Shows origin of "crescent" as merely the upper part of chitons of type Ic without charioteer girdle

VASE LIST (*Concluded*).

(Metropolitan Museum, New York).

Room	Case	I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
V. C., Second half																			
5	Q G. R. 1218			1															
	Q 08.258.23			1															
	K 06.1021.190	1*		1															*Very full, but does not come down [on arm
	K 06.1021.192			2															
	L 11.212.8			1															
	L 06.1075			1															
	L 08.258.16			1															
	L 07.286.42									1									Perhaps. Lecythos. Very faint
	L G. R. 601			1															
	L 08.258.18			1															
	L 08.258.17			1															
	P 06.1021.191			1				1											Other not visible

GRAVE-RELIEF LIST.

(Conze).

		I			II							III							
Plate	No.	a	b	c	a	b	c1	c2	d	e	f	a1	a2	b	c	d1	d2	d3	
17	38			1															
19	40					1													Rare costume in this group
20	41													1					
24	—			1															Other figure doubtful
25	—			1															" " "
29	67													1					" " "
30	68		1*	1															Stela of Hegeso. *Servant
33	71		1*											1					*Servant
34	73			2															
35	74			1											1*				*Rare and notable
36	79											1*		1					*Sketch, but probable
37	95																1		See Conze's note
38	97			1															
39	104			1															
40	109													1					Pamphile's costume not legible
44	145													2					
48	157			1															Probably
50	161			1															
55	207													1					
59	239													1					
61	254													1					

GRAVE-RELIEF LIST (*Continued*).

(Conze).

Plate	No.	I a	I b	I c	II a	II b	II c1	II c2	II d	II e	II f	III a1	III a2	III b	III c	III d1	III d2	III d3	
64	276													1					
65	280			1		1													
67	289			1										1*					*Ungirt; servant; under-dress has long, true sleeves. (See also Pl. 103, No. 462).
68	290			1										1					
70	294		1																Servant
71	297													1					
72	304													1					
73	306			1															
76	310						1												Very full, but overfold not to kolpos (IIb?)
77	332																	1	Young maiden
"	335																1		
78	320				1									1					
79	321								1										
80	322													2					See Conze's note. Probable
83	334													1					
85	337													2					See Conze's note
86	338			1															" " "
89	359													1					

GRAVE-RELIEF LIST (*Continued*).

(Conze).

		I			II							III							
Plate	No.	a	b	c	a	b	c1	c2	d	e	f	a1	a2	b	c	d1	d2	d3	
92	398													1					
93	378					1													Short, yet overgirt ; servant
97	410											1							Servant ; I do not follow Conze here
98	411													1					Probably
101	429			1													1*		*See Conze's note
103	443													1					
"	462													2					Under-dress of servant has long, true [sleeves
104	448													1					
109	465													2					
111	471 A			1															Probably
117	581													1					Conze agrees
141	718													1					
150	803								1										Melite ; the type for this chiton
152	805													1					"Hydrophoros"
156	820			1															Ungirt
157	877																	1	
165	852													1					Twice-girt
167	876																1		Young woman
168	873							1											Servant
"	881		1*															1	*Servant. See Conze's note on both [figures
"	906																1		Young woman

GRAVE-RELIEF LIST (*Concluded*).

(Conze).

		I			II							III							
Plate	No.	a	b	c	a	b	c1	c2	d	e	f	a1	a2	b	c	d1	d2	d3	
169	875																	1	
170	880		1																Servant
171	882		1																Servant
172	887			1															
175	894			1															Probably
176	896																1		
177	901		1																Servant
215	1088														1				
221	1084			1															See Conze's note
238	1131													1				1*	*Young girl
242	1146			1															

On examining the tables given above, and still more clearly after studying the percentage table to be found with the key, certain remarkable facts stand forth. First, there is close agreement between the lists based on vases. Next, there is a very great and characteristic difference between the vase lists and the two others, which again are quite different from one another. Thus our three sources give three wholly distinct results. In fact, one great family of costumes predominates in each list. Three-fourths of all the women's costumes shown on the vases are of the simpler Ionic forms. Over 60 per cent. of all the feminine costumes in sculpture are of the simple Doric types, while in the grave-reliefs about 57 per cent. of the costumes of women are composed of two chitons besides the himation. Conversely, it appears that these more complex costumes are almost wholly absent in the vase paintings, and while not usual in sculpture, particularly in the earlier sculpture, they appear to the extent of about nine per cent. (This figure is really somewhat too high, in that several grave-reliefs are published in the Brunn-Bruckmann series and are included here, as noted on page 5). Again, the Doric chitons worn alone, so common in sculpture, form but nine per cent. in the grave-reliefs. In the vase paintings they are more numerous, but still they form less than one-quarter of the costumes. The Ionic chitons are common in all the groups, although, as has been said, they are more than twice as numerous in the vase paintings as in the other groups.

A word may now be said about each of the types; a glance at the percentage table shows how common some are, how infrequent others; it happens, for instance, that one type (IIIa2) defined on the basis of indisputable evidence, does not appear in the four lists.

THE IONIC CHITONS.

Type Ia, the sleeveless Ionic chiton, is rare in sculpture and absent from the grave-reliefs, yet it constitutes 8—10 per

cent. of the costumes shown on the vases. Perhaps it was hardly sculpturesque enough to attract the sculptor and not formal enough for use on the reliefs; the vases indicate that it served rather as an informal house-dress.

Type Ib appears but once in the sculpture list (a Niobid), once on a vase in New York (No. 06.1021.181), but is the type of over eight per cent. of the legible costumes on the grave-reliefs. It is regularly a costume of servants.

Type Ic, Ionic chiton with pseudo-sleeves. The universal favorite. Although not quite one-fourth of the sculptured figures wear it, this only indicates that for one reason or another the sculptors preferred to represent types IIb and IIc². One-fourth of the figures on the grave-reliefs wear this chiton as the sole dress and, as far as can be determined, it is the form of the under-dress in type IIIb.

THE DORIC CHITONS.

Type IIa (without overfold) is fairly common in sculpture, rare elsewhere. Apparently it is not a domestic style, except as an over-dress in the costumes of type IIIb.

Type IIb (with short overfold) is the favorite with the sculptor, owing to its large and distinct forms, perhaps also as being the traditional primitive costume of the mainland of Greece and, by long association, that attributed to goddesses and the heroines of myth.

Type IIc¹ (with long overfold, not overgirt). Not common; it appears once in Conze and still better on a grave-relief from Thespiae (Stela of Polyxena, *Jb.* 28.1913.322). It can, therefore, be found in all classes of source-material; the long overfold is effective, though in practise probably much in the way of the wearer.

Type IIc² (with long overfold, overgirt). The so-called "peplos of Athena." Very common in sculpture, frequent on the vases, usually a costume of goddesses and heroines. Formal and sculpturesque; in domestic use a common over-dress of children and young women.

Type IId. Doric chiton with two or more brooches, or an equivalent seam on each side. Rare everywhere, but beyond doubt. On the vases, often a costume of Nike, but especially noteworthy as appearing on the Athena Giustiniani, on two reliefs in Conze, and as the intermediate type between the strictly Doric chitons and the more Ionic forms.

Types IIe and IIf. Indisputable instances, though rare, are found.

COSTUMES OF TWO CHITONS.

Types $IIIa^1$ and $IIIa^2$. Servants' costumes, the former being the common form. As such, found in all groups of material. Under-dress always Type Ib, except in one vase (N. Y. Metro. Mus. G. R. 1243).

Type IIIb. Extremely common on the grave-reliefs, rare elsewhere. Slight differences in the character of the under-dress, but all apparently belong to type Ic.

Type IIIc. Rare, but found in all classes of material.

Type IIId. Three varieties, according to the way in which the girdle is worn. This costume consists of IIc worn over Ic. Common on the grave-reliefs, rare elsewhere.

* * * * *

If our purpose be to picture to ourselves the costumes worn by Athenian women in the homes of the better sort in the fifth and fourth centuries B. C., and if we consent to accept the grave-reliefs as our primary source (because of their purpose, their deliberate and painstaking technique and because they form a singularly homogeneous group of evidence), we shall conclude with results somewhat as follows.

The ladies of the household wear either the Ionic chiton with pseudo-sleeves alone, or more frequently with a simple Doric chiton girt over it. In either case they are apt to wear an himation as well. Sometimes they appeared in other costumes, but there appears to be no especial significance to this, except that it shows that there was no rigid law of fashion at work ; the exceptions are numerous.

The young maidens either wear dresses similar to those of their elders, or more characteristically wear the peplos with long overfold over the Ionic chiton with pseudo-sleeves. It is indeed possible that the older women sometimes wear this costume with the long overfold, since the himation often falls where it would hide the bottom of the overfold, if it existed, but a careful examination of all the evidence has led to the conviction that this is not the case, but that these are the costumes of young maidens and children exclusively. The long overfold gave them the added protection that the himation gave to their elders; the himation is notably rarer with this costume than with the others.

The servants often wear dresses substantially like those of their mistresses, to whom no doubt they had originally belonged ofttimes. But others wear costumes that seem to belong to the servant alone, the long-sleeved Ionic chiton, either worn alone or with a sleeveless Ionic chiton worn over it, falling either to the knees or to the feet. This raises the question as to whether the "Niobid" No. 312, of the Brunn-Bruckmann series, is an exception to this rule.

The costume of the little girls, like that of the men and boys, must form the subject of another study; in general it may be indicated that their costumes oftenest belong to types Ia, Ic, IIc^2, $IIId^2$ and $IIId^3$.

Those who wish to study closely the details of any of these costumes, or who wish to reconstruct them, will find the tables of source-material useful indices. Nor will the trouble of such inquiry be without further and greater reward, especially when it leads to the grave-reliefs. Anyone who has approached these in a sympathetic spirit will soon learn to know as personal friends the noble and gentle people of that ancient day, and will feel at last how great was the human wealth of the world that could lose in one short year its Aristotle, its Alexander and its Demosthenes and still be not bereft utterly; one who has been their guest-friend through many days may say so much.

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